means physical signs of disease in lung still present, though less marked than on admission. General health improved, but not restored.

In the 1930-1 report, Sir St. Clair Thompson states:— "Out of thirteen cases with laryngeal tuberculosis, approximately thirty per cent. were "arrested," while sixty-six per cent. of the remainder were "improved." These figures suggest that with more modern methods of diagnosis and treatment there is a very much better prognosis.

Pink Disease

By F. M. B. Allen, M.D., M.R.C.P.LOND., from the Belfast Hospital for Sick Children

CASES of pink disease have been observed at infrequent intervals in Northern Ireland until the last six months; since then the condition appears to have become much more common. As the disease is somewhat unique in its manifestations, and therefore liable to be puzzling to the uninitiated, this short account with three illustrative cases is given. Few, except the most modern textbooks on pædiatrics, contain an account of the condition.

Other names given to the disease include erythrædema-polyneuritis, and acrodynia. It has been studied in the Antipodes, having been first described by Swift in Australia in 1914, and subsequently in England and America. Accounts originating from England would suggest that the disease was endemic in various areas, and, in view of the number of cases under observation at present, it is possible that a mild epidemic is developing in Northern Ireland.

The cause is unknown. It has been suggested that the condition is a deficiency disease, but this is not borne out on account of the negative response to dietary regulation. That a virus is responsible would appear more probable, as the disease is mildly contagious, there being some support for the belief that the condition is related to "toxic polyneuritis."

The disease affects infants and young children, more commonly those who are well cared for in the middle and upper classes. It is characterized by cedema and erythema of the extremities, and mothers notice particularly refusal of food and persistent crying, this latter being of especial significance in infants. The disease is essentially chronic, and the characteristic erythema and cedema of the hands and feet may not be present for some weeks. A mild infection occurs in the early stages of the disease, sometimes with vomiting and diarrhæa, an illness commonly passed off as a "cold" or "influenza." About this time the infant begins to refuse food, and is wakeful at night with persistent crying, and lapses into an attitude of general and complete miserableness which does not respond to any comforting agent. Such a picture is liable to be confused with pyelitis or blamed upon teething, or even be suggestive of chronic catarrh of the middle ear. The temperature is usually normal. In the early stages there is often a milarial type of rash referred to as a "sweat rash," as in the following case:—

N. K., aged 9 months, was seen because of a rash which involved particularly the groins, the back of the neck, and folds of skin around the shoulders and waist. He refused all food, cried incessantly at night, and could not be pacified even with luminal grain i. He lost weight, and after three weeks developed the typical cedema and erythema of the hands and feet. Seven months later he was normal, taking his feeds well, gaining weight, and sleeping well.

This early rash undergoes desquamation after a variable interval. The anorexia, fretfulness, and insomnia increase, muscular hypotonia becomes marked and increases rapidly, mental depression is apparent, and photophobia is often present. At some period during the active stages of the disease there is characteristic redness and swelling of the hands and feet; these remain cold in contrast to the suggestion of warmth conveyed by the pink or "raw beef" appearance of the skin. There is no pitting on pressure.

J. E., aged 11 months, had a history of chronic otitis media three months previously, but this had cleared up. One month later he had a temperature for a few days, during which he was drowsy and slept all the time; two weeks later he refused his feeds, and his mother could not persuade him to take food of any kind by any possible amount of coaxing, and he lost three pounds in six weeks. When first seen he was sleeping practically none at all, and only for short intervals, waking up with a scream. He had the two types of rash, both the fine milarial type, over the areas where sweat accumulates, and also the typical erythema of the hands and feet, which, the mother said, she could not keep warm. Six months later he was decidedly better, but still had a considerable amount of hypotonia.

Older children complain of a feeling like "pins and needles," and it seems probable that all the subjects of this disease so suffer, and that the insomnia and miserableness are due to this constant unpleasant sensation. The infant cannot be amused, it is continually rubbing its hands and feet or picking at its extremities. In bed there is a constant moving from one position to another, and young infants often bang their heads unmercifully. On account of this restlessness, the child cannot be kept covered with bedclothes, and persistently throws them aside. Hypotonia of the muscles becomes well marked and increases, so that even the facial muscles become involved, giving an expression which is easily recognized. Some observers refer to the expression as being that of a gosling, on account of the lack of tone of the masseters, so that the mouth hangs open. Such an expression is also suggestive of mental deficiency.

It has been found that the red and white cells are usually increased, and that the hæmoglobin also may be raised. The calcium in the blood is increased, and the sedimentation rate of the red blood-cells is accelerated.

The course of the disease is essentially a long one, and slowly progressive for some weeks, there being no abrupt onset, but rather a mild infection characterized by slight transient pyrexia, vomiting, or diarrhea. There may be an interval of six weeks before the characteristic swelling and redness of the hands occurs, insomnia and anorexia usually preceding it. The mortality during the early stages is about twenty-five per cent., death occurring as a result of broncho-pneumonia, gastroenteritis, or miliary tuberculosis.

A. B., aged 9 months, had a history of excessive perspiration three months previously, followed two weeks later by a "sweat rash." She became very fretful, refused her food, and did not sleep. There was marked photophobia. She was admitted to hospital, and kept on sedatives to procure sleep. She took her feeds better, but began to have a temperature; loose motions followed, and eventually she died of gastro-enteritis.

In a few cases the body rash may become infected with staphylococci and give rise either to localized impetigo or furunculosis. The disease lasts from six to nine months, with the prospect of a slow but gradual improvement and complete recovery in those cases which are not fatal in the early stages.

The treatment is most difficult. The anorexia requires careful nursing, and it requires a good mother or nurse to persuade the infant to take sufficient nourishment. Variety in the dietary is essential, and spoon-feeding or even the stomach tube may have to be resorted to. The insomnia is very intractable, and the common hypnotics may be ineffectual, but bromide, chloral, medinal, trional, and luminal should be tried. Recently the intraperitoneal injection of 10 c.c. of four per cent. sodium citrate has been advised, and I have found this to give valuable immediate but temporary relief, and so procure sleep. This may be repeated daily. Light socks and gloves should be worn to protect the hands and feet from injury. The body should be covered with cellular linen or cotton garments, and then woollen clothing sufficient to keep the child warm without the use of bedclothes, which are always thrown to one side. The sides of the cot should be padded with pillows to allow the child to move as much as it wishes without the risk of injury. Vitamines have been recommended, on the assumption that the disease is a deficiency one, but for this there is no support. Braithwaite recommends filtering the rays from the violet end of the spectrum by means of ruby glass, in the belief that ultra-violet radiation actually aggravates the condition. A Sollux lamp with ruby glass inserted is a valuable means of administering infra-red rays, and in my experience has been beneficial in procuring sleep without drugs.

Toxic Goitre

By J. A. SMYTH, B.SC., M.D., D.P.H. from the Royal Victoria Hospital, Belfast

PROBABLY the greatest step in the advance of knowledge of hyperthyroidism was taken by Plummer in 1913, when he made an outstanding contribution in differentiating between exophthalmic goitre and toxic adenoma, at the same time establishing the principles for the administration of iodine in the former condition. A steady controversy has circled round these two questions. Many people deny that there is any real difference between toxic adenoma and exophthalmic goitre, and hold that what are apparently distinctions are only due to differences in degree and the age of onset. As a corollary they hold that iodine can be as advantageously administered in the one as in the other. Then, again, some believe that iodine should only be